

AFRICANIZED HONEYBEES

What are Africanized Honeybees (AHBs)?

In 1956, honeybees from Africa were imported into Brazil for genetic studies to try to improve the local European strain of honeybees. In 1957, these AHBs escaped and began to breed with wild and domestic honeybees. Since then, these AHBs have extended their range northward into Central and North America. In 1990, AHBs reached the United States (U.S.) and in October 1993, AHBs were at California's southern border. AHBs are now established throughout Southern California.

How do AHBs differ from other bees?

AHBs and European Honeybees (EHBs) look and behave in much the same way. However, there are important differences. AHBs are highly aggressive and very protective of their colony. Vibration or noise, such as a lawn mower or chain saw, within 100 feet of AHBs often incites them to attack. Movement, such as children playing, within 50 feet can also precipitate an attack. During an attack, AHBs will pursue an individual or animal for up to a quarter of a mile. AHBs may remain agitated for eight or more hours.

AHBs differ from EHBs also in their selection of sites for colonies. AHBs build colonies in underground sites, in small sites such as flower pots and old tires, and even in open, unprotected areas. EHBs are far more discriminating in selection of colony sites.

The difference between a swarm and a colony is important because honeybees are generally not aggressive when in a swarm. Bees swarm to establish new colonies. When honeybees swarm, the old queen and the older bees depart to start a new colony elsewhere, while a new queen and the remaining workers perpetuate the old colony. AHBs swarm 20 to 40 times more often than EHBs. Swarms can be recognized by large numbers of bees clinging together in a cluster or ball and not associated with a hive. A swarm may contain 3,000 to 50,000 honeybees, including a large number of bees flying around this cluster.

Are the stings of AHBs more deadly?

The sting of an AHB is no more toxic than that of an EHB. However, because AHBs are far more aggressive, a person can receive ten or more times as many stings from disturbing an AHB colony. Persons who are stung several times or who are allergic to bee stings should seek immediate medical attention. Sting victims should be monitored by a doctor for several days following apparent recovery. Delayed toxic effects from the venom, including kidney failure and cardiac arrest, may occur hours to days after the initial stinging incident.

Why don't we just kill all bees?

AHBs have had a significant impact on commercial and hobby bee-keeping in the U.S. AHBs may cost the U.S. bee-keeping industry \$29 to \$58 million annually. However, approximately \$20 billion of the U.S. agricultural industry revenues depend on the pollinating efforts of bees. For every dollar of honey and wax sold, \$143 worth of pollination is provided by honeybees (Texas A&M University, Department of Entomology). Honeybees are important to the economic welfare of the U.S. Complete destruction of honeybees is not an option for control of AHBs and is discouraged.

What can I do to keep from being attacked by AHBs?

Honeybees sting only when defending their colony. If you discover a swarm or colony of honeybees, avoid the area. Keep children and pets away from swarms and colonies. Avoid using power equipment or making loud noises or vibrations near colonies. If honeybees attack you, quickly leave the area. A healthy person can usually outrun honeybees. Cover your face with your arms and clothing and seek shelter in an automobile, building, or other enclosed structure. Notify your county agricultural commissioner, environmental health department, or vector control agency. Do not attempt to remove the colony yourself.

How can the stingers be removed?

Honeybees can sting only once. The stingers are barbed and cannot be removed by the bee. After the bee has stung its victim, the stinger, venom sack, and other associated tissues are torn from the bee's body. Sting victims should remove the stinger as soon as possible, preferably within 20 seconds, to prevent the complete contents of the venom sack from being pumped into the skin. Remove the stinger by scraping it out with your fingernail or the edge of a credit card. Do not pull out the stingers with your fingers or with tweezers since this may squeeze venom into the sting site. Wash the affected area with soap and water. Apply an ice pack to relieve pain. See a doctor if breathing is difficult, if you are stung several times or if you are allergic to bee stings.

Where can I find more information on AHBs?

The California Department of Food and Agriculture has information available at their website http://www.cdffa.ca.gov/phpps/pdep/ahb_profile.htm.